

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-71 (Canceled)

Claim 72 (New) An inductively coupled plasma CVD processing system, comprising:

a plasma processing chamber;
a dielectric window forming a top wall of the plasma processing chamber;
a substrate support adapted to support a substrate within the processing chamber; and
a plurality of injector tubes adapted to introduce process gas into the processing chamber, all of the injector tubes being spaced outwardly from the periphery of the substrate when the substrate is supported on the substrate support.

Claim 73 (New) The system of Claim 72, wherein:
the injector tubes are provided on a first gas ring;
at least some of the injector tubes include an orifice oriented relative to the axis thereof to direct the process gas in an upward direction away from the substrate when the substrate is supported on the substrate support; and
at least some of the injector tubes are oriented in the plasma processing chamber to direct the process gas along axes that intersect an exposed surface of

the substrate at an acute angle when the substrate is supported on the substrate support.

Claim 74 (New) The system of Claim 72, wherein:

the injector tubes are provided on a first gas ring; and

all of the injector tubes are oriented in the plasma processing chamber to direct the process gas along axes that intersect an exposed surface of the substrate at an acute angle when the substrate is supported on the substrate support.

Claim 75 (New) The system of Claim 72, wherein:

the injector tubes are provided on a first gas ring; and

all of the injector tubes include an orifice oriented relative to the axis thereof to direct the process gas in an upward direction away from an exposed surface of the substrate when the substrate is supported on the substrate support.

Claim 76 (New) The system of Claim 72, wherein the injector tubes are detachably connected to a first gas ring made of aluminum which includes outlets adapted to supply process gas into the plasma processing chamber.

Claim 77 (New) The system of Claim 76, including a second gas ring disposed above or below the first gas ring in the plasma processing chamber.

Claim 78 (New) The system of Claim 72, wherein a plurality of gas flows from the injector tubes overlap each other in a plane parallel to an exposed surface of the substrate when the substrate is supported on the substrate support.

Claim 79 (New) The system of Claim 72, wherein each of the injector tubes includes an orifice, and each of the orifices is spaced the same distance from substrate when the substrate is supported on the substrate support.

Claim 80 (New) The system of Claim 72, including a substantially planar electrically-conductive coil which inductively couples RF energy into the plasma processing chamber and energizes the process gas into a plasma state.

Claim 81 (New) The system of Claim 72, wherein all of the injector tubes have the same length such that exit orifices of the injector tubes are spaced the same distance from the periphery of the substrate when the substrate is supported on the substrate support.

Claim 82 (New) The system of Claim 72, wherein some of the injector tubes have different lengths such that exit orifices of some of the injector tubes are spaced a different distance from the periphery of the substrate when the substrate is supported on the substrate support.

Claim 83 (New) The system of Claim 72, wherein all of the injector tubes are spaced outwardly from a periphery of the substrate support.

Claim 84 (New) The system of Claim 72, wherein the substrate support includes means for maintaining the substrate at a desired temperature when the substrate is supported on the substrate support.

Claim 85 (New) An inductively coupled plasma CVD processing system, comprising:

a plasma processing chamber;
a dielectric window forming a top wall of the plasma processing chamber;
a substrate support adapted to support a substrate within the processing chamber, the substrate support including means for maintaining the substrate at a desired temperature; and

(i) a plurality of injector tubes each including an orifice oriented relative to the axis thereof to direct the process gas in an upward direction away from the substrate when the substrate is supported on the substrate support; and/or (ii) a plurality of injector tubes each oriented in the plasma processing chamber to direct the process gas along an axis thereof that intersects an exposed surface of the substrate at an acute angle when the substrate is supported on the substrate support.

Claim 86 (New) The system of Claim 85, wherein the means for maintaining the substrate at a desired temperature includes an electrostatic chuck and is adapted to maintain the substrate at a temperature ranging from about 325°C to 375°C when the substrate is supported on the substrate support.

Claim 87 (New) The system of Claim 85, wherein the substrate support includes a heat transfer gas source which is adapted to supply a heat transfer gas to control the temperature of the substrate to a temperature of about 100°C to 400°C.

Claim 88 (New) The system of Claim 85, wherein the injector tubes are detachably connected to a first gas ring, the first gas ring includes outlets through which process gas is supplied into the plasma processing chamber, and further including a second gas ring disposed above or below the first gas ring.

Claim 89 (New) The system of Claim 85, wherein the injector tubes are oriented in the plasma processing chamber to direct the process gas along axes that intersect the exposed surface of the substrate at an acute angle when the substrate is supported on the substrate support.

Claim 90 (New) The system of Claim 85, wherein the injector tubes include an orifice oriented relative to the axis thereof to direct the process gas in an upward direction away from an exposed surface of the substrate when the substrate is supported on the substrate support.

Claim 91 (New) The system of Claim 85, wherein a plurality of gas flows from the injector tubes overlap each other in a plane parallel to an exposed surface of the substrate when the substrate is supported on the substrate support.

Claim 92 (New) The system of Claim 85, including a substantially planar electrically-conductive coil which inductively couples RF energy into the plasma processing chamber and energizes the process gas into a plasma state.

Claim 93 (New) The system of Claim 85, wherein each of the injector tubes has the same length.